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ABSTRACT

Needs assessment is presented as a scanning process to identify if and where interventions are required in the educational setting and also to build and support successful implementation of those processes. Themes or perspectives, which provide a general framework for the work of a needs assessment team, are outlined. Within this framework, needs assessment is seen as problem-focused, continuous, a planning guide, a multi-faceted data gathering process, a public, conscious activity, value laden, and educational. Steps in the needs assessment process are described and discussed: (1) establish needs assessment planning team; (2) identify problem focus; (3) develop understanding of organizational context and obtain necessary support for participation of target population; (4) verify and refine problem focus; (5) determine further information needed and methods for collecting and analyzing information using three or more different strategies; (6) determine resources necessary to implement needs assessment plan; (7) develop more detailed plan, based on available resources, including time-lines, contingency plans, and specific task assignments; (8) implement needs assessment plan, making any necessary midstream adjustments; (9) analyze results of needs assessment process; and (10) develop action plan based on results of needs assessment. Appendix A outlines a model for problem identification and problem planning. In Appendix B, brief descriptions are offered of data gathering methods. Needs assessment methodologies are outlined in Appendix C. The case history of a problem-focused needs assessment conducted in Littleton, Colorado is also appended. (JD)

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DESIGNING AND CONDUCTING
NEEDS ASSESSMENTS IN EDUCATION

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INTRODUCTION

Once upon a time there were three pigs who were faced with the problem of coping with the big bad wolf.

The first pig was quite oblivious to the realities of the situation and the consequences of his behavior. "What is a big bad wolf?" he mumbled as he nonchalantly gathered straw with which to build his house.

The second pig was an old-timer in this wolf-fending business and, after contemplating the wolf phenomenon by himself for a short period of time, decided that what was "needed" was a house constructed to withstand winds that exceeded the velocity of the huffing and puffing by the big bad wolf. The second pig contracted with the National Science Foundation for the construction of a windtunnel. Then, with the services of a local architect and building construction firm, he tested a variety of different house styles and designs to determine which plan would withstand the wolf's most forceful huffs and puffs. Although the investment was substantial (12 million corn cobs), the second pig was quite pleased with himself, particularly when he demanded that the house be built to withstand five times the maximum huffing and puffing by a single wolf ever recorded by modern pig. Now he was protected even if several wolves were to come to his door at the same time!

The third pig was dismayed by the behavior of the first pig but was captivated by the expensive yet seemingly worthwhile steps the second pig was taking to construct a wolf-proof house. Nonetheless, she was somewhat uncomfortable with the second pig's approach, particularly when she had learned that the advice of friendly wolves had not been sought in the planning stages of the second pig's project. To satisfy her desire for a third opinion, she brought together representatives from a variety of constituencies who had dealt with wolves, including a couple of friendly huffers and puffers. After considerable interviewing of pigs, pig house builders, and expert wolf-fenders, surveying, analyzing available relevant data, and brainstorming with respected colleagues concerning possible side effects associated with various alternatives, she decided to build a modest brick pig house with some unusual but necessary landscaping. The whole process, from conceptualizing the problem, systematically determining her "needs," and building the house cost about 65,000 corn cobs--substantially more than your average brick pig house but far less than the second pig's windtunnel-tested domicile.

One day, the mean old wolf passed by the three houses. From the wolf's perspective, the straw house amused him (his grandfather had told him stories about how easy those were to blow down), and the others looked pretty much the same

(after all, a brick house is just a brick house). The wolf thought that a pig dinner was just what he "needed" (actually what he wanted). The story of the first little pig is well known.

As the big bad wolf walked up to the second pig's house, he uttered a warning to the old-timer that was confidently rejected. With this rebuff, the wolf, instead of huffing and puffing, pulled out a sledge hammer, knocked the door down, and ate the spendy but short-sighted old-timer for dessert.

Still not satiated, the wolf ambled up the third pig's walk to repeat his act. Suddenly, a trap door in front of the house opened and the wolf dropped neatly into a deep, dark pit and was never heard from again.

MORALS:

1. It's hard to teach old pigs new tricks.
2. The services of NSF have always been over priced.
3. Before you invest lots of energy and money meeting a need, you'd better be sure the need, as you have defined it, actually exists.

Toward Designing a Better Wolf Trap

In this monograph, a number of principles and practices required for effective needs assessments in education are presented. Needs assessment is not necessarily a simple procedure conducted independently of the target group or school district. That is, a variety of persons representing different perspectives and values should be involved in assessing needs. Needs assessment is presented here as a scanning process used to identify: (1) if and where interventions are required in the educational setting, and (2) how to build support for the successful implementation of those interventions. In this way, needs assessment becomes an integral part of the planning process and, by definition, an initial step in the program planning, implementation, and evaluation

cycle (Kuh, 1980; Scriven, 1978).

Needs assessment can be a costly endeavor; however, the direct and indirect costs of not doing a thorough needs assessment can be staggering. In fact, one of the most irresponsible outcomes associated with current educational practice is that educators are often unaware whether money is being wasted in the name of programs designed for school improvement. Sometimes these programs, no matter how well intentioned, actually result in negative impacts.

The purposes of this document are twofold: (1) to make public school personnel aware of the importance of needs assessment as a problem identification and planning tool; (2) to familiarize educators with existing "best practices" in needs assessment. The first step toward these ends is to better understand the concept of "need" and appreciate the different kinds of "need" that can be targets of needs assessment.

Needs assessment is only one small part of a more comprehensive program planning process. As planning proceeds and continues, problems and needs related to those problems are refined and redefined. Meeting one set of identified needs usually creates new needs and concerns. Needs assessment on an ongoing basis allows planners to continue "taking the pulse" of the district and modify their plans accordingly. This cyclic planning, implementation, and evaluation process assists educators to plan within the political context of the local school district and its changing needs.

Toward an Understanding of Need

One of the more elusive concepts in the art of needs assessment is that of "need" itself. Need has often been determined through a democratic process whereby need is defined as a change desired by a majority of some reference group. There are problems inherent in this process, however.

For example, assessments based on this definition do not adequately distinguish between "need" and "want." Thus, when parents or students are asked to describe the current state of affairs as well as what they would prefer, the results are likely to reflect what the respondents want rather than what they need to function satisfactorily. That is, persons' perceptions of what they think they "need" (really want) are received rather than an accurate expression of need. Of course, some wants or preferences may, in fact, reflect need. And if ignored over a period of time, certain wants or preferences may, indeed, evolve into needs (Lenning, in press). However, wants do not necessarily represent needs.

In a second popular approach to needs assessment, need is defined as the discrepancy or difference between an individual's or group's present state of functioning or performance and the ideal or acceptable level of functioning

(Kaufman, 1972). In other words, needs are thought to be shortfalls in educational outcomes or results. This method of assessing needs is attractive due to its conceptual simplicity (i.e., need = desired present level of performance). Also, this method is quite congruent with the goal/objective/outcome orientation that has characterized public school education during much of the past decade. While the relative clarity of this approach is attractive, the discrepancy definition has the potential to distort the validity and, therefore, the usefulness of the results. The term "need" when equated with a gap or discrepancy often connotes negativism or the fact that something is missing. In reality, needs may exist without a gap being apparent.

For example, most students must devote a certain amount of time to studying to remain in good standing academically. That is, some student effort (studying) must be expended to achieve an acceptable level of performance. In this example, studying can be thought of as a maintenance need and that a certain amount of study time is required for a student to remain in school. If a student attempted to get A grades instead of merely passing grades (C average), the student would probably have a "need" to spend more time studying. This is an incremental need in that the student must study more hours than the number required to merely maintain a minimum level of acceptable academic performance.

Another variable to be considered in this example is that of resources. Resources required by a student to earn

higher grades may include enough time available for studying and a quiet place to study. While these two particular resources seem rather obvious, they are less so to some middle school students bewildered by the challenges related to managing emotions. Needs assessments based on a discrepancy definition usually emphasize incremental needs but typically are not sensitive to the existence of maintenance and resource needs.

The existence of other kinds of needs further question the utility of the discrepancy definition. Consider the differences between short and long-term needs, and specific and generic needs. A student and a counselor who work together in planning the student's fall semester schedule may focus on the short-term needs--an acceptable schedule consistent with requirements for graduation. However, a long-term need for selecting courses to meet college entrance requirements also may be present and, perhaps, more important. The superintendent may perceive a specific need to have a particular consultant present an inservice session on needs assessment. While the "need" for such a session may be real, it could be questioned whether the need is generic (scheduling an inservice session) as compared with a specific need (a particular person to conduct a session on needs assessment). The point is that for teachers and administrators to help students and themselves in meeting certain needs, an integral step in the process is to identify the kind of need to be addressed.

Another persistent problem associated with the discrepancy definition concerns the degree to which desired states or levels of performance can be accurately described. In many instances, the desired or ideal state (e.g., teacher's knowledge about handicapped children) is difficult and sometimes impossible to describe. Also the discrepancy approach does not account for level of necessity, particularly as necessity is contrasted with luxury or levels of performance that exceed minimal requirements for satisfactory performance. Some persons believe that when assessing educational needs, skills that will enable school children to function adequately in society (e.g., minimal reading comprehension level) should be provided before dealing with issues that essentially serve as "frosting on the cake" or appear to be superficial and tangential rather than fundamental or basic. Others have also suggested that need will vary depending upon the perspective from which need is approached. For example, psychologists usually adopt the frame of reference of the individual and tend to emphasize the personal and affective components of need. Sociologists, however, interpret needs from the perspective of a group and concern themselves with issues that must be resolved collectively to improve group or organizational performance (such as a school system or building), thereby de-emphasizing the importance of the individual's needs (Lenning, in press). Because of the problems associated with traditional definitions of need, a number of persons have offered more precise definitions of need.

For example:

"Need is a factor or element without which a person cannot function satisfactorily" (Scriven & Roth, 1978);

"Need is something that can be shown to be necessary or useful for the fulfillment of some defensible purpose" (Stufflebeam, 1977);

"Need is a necessary or desirable condition -- whether it be an end result or a discrepancy -- as judged by a relevant person or group using multiple objective criteria that have been previously agreed upon" (Lenning, in press).

Note that these more recent and comprehensive definitions consider "need" a combination of level of necessity and discrepancy on some dimension(s). The level of necessity and discrepancy requirements serve as cornerstones for the definition of need on which the needs assessment process described in the following pages is based.

Common Errors in Needs Assessment

Although needs assessments often have been discussed and conducted, few detailed descriptions of the procedures employed can be found in the literature (Stufflebeam, 1977). Some procedures used by school personnel have inherent weaknesses that undermine the validity and the usefulness of their results. Because the suggestions provided in the following sections represent a departure from what has been traditionally referred to as "needs assessment," it may be helpful to consider what needs assessment is not before moving to what needs assessment is and how needs assessment may more effectively be conducted.

Those responsible for determining "need" have, in the past, made a number of errors--both conceptual and procedural.

Although the following list of commonly made mistakes is incomplete, it can be considered representative of the kinds of concerns to which needs assessors must remain sensitive.

1. The real reasons for the needs assessment are not apparent for some reason.

Who wants to have needs assessment data available? Why? What are the stated and the unstated reasons for the study? A needs assessment commissioned by a superintendent who has already decided what the system's teachers "need" could be used to validate what the superintendent believes to be true or to conceal controversial teacher needs that may exist.

2. The needs assessment is planned by one person or a small number of individuals representing only a few of the target groups.

One individual should never plan, implement or interpret findings from a needs assessment. Four (or three or six) heads (with different perspectives) will always be better in brainstorming the variety of dimensions that must be considered in the planning stage. Scriven (1978) believes that seeking assistance from a second person will increase the number of possible solutions to potential problems by about 40 percent. A third person might well provide another 20 percent, and perhaps 10 percent can be expected from each of two more assistants. In short, get as much help as is feasible when conducting a needs assessment; the diversity of perspectives will reduce the possibility that important issues are overlooked and increase the chances that the needs assessment data will be used in planning interventions.

3. The target audiences are inappropriately selected or inaccurately described.

Whose "needs" are to be determined? When an inservice session for teachers is planned, is the target audience "all teachers" in the system or specific subsets of teachers? If students' needs are to be determined, which students (system wide, specific levels, building, etc.; present, past, future, potential) comprise the target group?

4. A strength analysis is not performed.

Needs assessment presents an occasion for a thorough review of a school or school district, and an opportunity to inventory its successes. Who is available in the community to assist in validating concerns and issues about which needs assessors should be aware? What resources (human, material, financial) are available to address the problems identified during the process? What does the system do exceptionally well?

Because the process tends to emphasize deficits or shortfalls, needs assessment tends to focus on aspects of the system that are not performing adequately. Establishing a list of the strengths of the system can help maintain a balanced perspective as to the worth of the system and bolster the confidence of the staff and others involved in the process.

5. The needs assessment focuses exclusively on individuals rather than including an assessment of the organization within which they work.

Most needs assessments do not go beyond the compilation of individual needs that identify knowledge, skills, and attitudes necessary for satisfactory functioning. But the organizational context in which teachers work may facilitate or inhibit their performance. An assessment of factors such as decision-making procedures and styles, classroom, building or district goals, etc. is important for a more complete understanding of both needs and resources available to meet those needs.

6. The definition of need is based entirely on a discrepancy formula; i.e., defining need as the distance between a desired or ideal state of functioning and present performance.

Identification of needs that reflect a combination of discrepancy and level of necessity are more useful in planning subsequent interventions. That is, the degree to which something must be available for a person or group to function in a satisfactory manner provides a more concrete starting point for planning. Desirable or "ideal" states do not necessarily infer "necessity"; as a result using these as reference points can be very misleading (Scriven & Roth, 1978).

7. A single criterion or method is used to determine need (Stufflebeam, 1977).

Common mistakes related to this error include the exclusive use of surveys, adherence to arbitrary criteria, and inappropriate use of the democratic process.

A. Surveys. Needs cannot be determined merely by asking people what they need, no matter how insightful, honest, wise

and mature the target group may be (recall the earlier discussion about discerning wants from needs). Of course, surveys are often politically and economically feasible. A standard rule of thumb is to use at least three different types of data collection methods to increase the validity of the findings. That is, if a "need" is determined, it probably exists and is not an artifact or a finding produced more by the way the data were gathered than by the characteristics of the target audience.

B. Arbitrary criteria. Use of a benchmark such as national normative data or politically established scores to determine whether need exists is inconsistent with the definition of need used in this document. Need must be defined in terms of the relevant contextual factors mentioned in #5 above. National norms are satisfactory in some instances, but they should not always nor automatically be applied.

C. Democratic process. In some districts, parents, teachers and other taxpayers vote to determine whether a need exists. The rationale for this procedure is based on the assumption that members of a community know what they or their children "need." In many instances, this assumption may be faulty. Certainly there are a number of issues about which community input is required. But to allow the community alone to determine what is "needed" is not sufficient and may even be misleading. Furthermore, in some cases voting can serve to inhibit rather than encourage discussion about issues of

importance. The range of needs identified and addressed during this process can be restricted by the inherent "win-lose" consequences of electoral processes. Rather than putting the determination of need to a vote, the preferred approach includes efforts to bring the various involved constituencies to a reasoned consensus concerning important issues or needs.

8. The information about the assessment is available to the community on a limited basis.

Needs assessors may assume that no one can really understand or appreciate needs assessment. To do so, however, is misguided and can jeopardize the validity of the needs assessment data. To the extent that it is feasible, questions about the assessment should be answered as completely as possible. Relevant information should be shared at open meetings, through newsletters, and through informal communication networks.

9. Political pressure alone is allowed to determine need.

Special lobby groups often convince decision-makers and legislators that certain needs exist (e.g., handicapped children and vocational education lobbies) without substantial documentation. Needs should not be determined by special interest groups alone. This suggestion, like #6 above, is a departure from accepted practice. Nonetheless, it is unacceptable to permit such processes to continue without at least recognizing and attempting to ameliorate some of the negative consequences associated with each. As more needs assessors recognize these constraints, more effective strat-

egies for coping with them will be developed.

10. Needs are prioritized by a rating or rank ordering process.

Given finite resources, needs almost always have to be prioritized to plan interventions. However, an apportioning process--while not foolproof--it preferable to simple rank ordering. Apportioning or differential weighting requires that involved persons indicate the relative importance they place on particular issues or needs. For example, if parents are asked to determine whether the math, reading, or science programs should be improved, a survey might result in the following rank ordering: reading, math, science. An administrator could interpret this as a mandate for investing the available resources in the reading area. However, if the parents were asked to distribute \$100 among the three areas according to their perceptions of how much of each their children "need," perhaps the apportionment would be \$40 for reading, \$35 for math and \$25 for science. In this instance, parents think all three are important enough to receive some of the additional support. Rating or rank ordering merely indicates which programs are more important than others, not how much more important.

11. Positive and negative side effects are overlooked.

A positive side effect of needs assessment could be increased community understanding about issues related to the needs assessment. A negative side effect could be reduced public support for education resulting from the apparent inability of the school system to meet students' needs. Whenever there is an intervention into a school system (such

as conducting a needs assessment), some system responses are likely. Although the exact responses cannot be predicted with accuracy, the general consequences should be hypothesized and plans made accordingly. In fact, some could be so negative as to undermine the credibility of the needs assessment or to require redesigning the needs assessment strategy. Other consequences cannot be predicted but merely observed and dealt with after they have been identified.

12. Needs assessment must be completed before planning can begin.

Some believe that the needs assessment process will result in all the information required for system or program planning. As a result, planners and decision-makers may find themselves thinking "until we do this . . ." or "unless we know that. . ." or "before such and such . . ., we can't plan anything!" Needs assessment is a necessary part of a continuous cyclical planning process and the best way to begin either may be to begin both.

13. Needs assessment is viewed as an end in itself

It is not unusual for a needs assessment team to invest considerable time and energy in the process and to look forward to a "finished product." For some, the energy and commitment required to complete the needs assessment may be too great and a "burnout" phenomenon may be experienced. The team's desire for closure is natural, but it supports the incorrect assumption that its work is finished when the formal needs assessment is completed.

Perhaps the conclusion of a needs assessment does mark an end--an end to the beginning. Of equal importance is using the information gathered during the process to design appropriate educational interventions. In fact, to be most effective, the needs assessment process should be recycled and personnel encouraged to remain responsive to other needs that may emerge over time.

Guiding Principles for Needs Assessment in Education

In this section, seven major themes or perspectives are outlined which, when considered together, provide a general framework for the work of a needs assessment team. Of course, contextual factors in a given building or district may prevent the use of some of these principles. In general, however, they should prove helpful.

1. Needs Assessment is Problem-focused.

While needs assessment can be used to determine educational goals, it perhaps is most appropriately viewed as a problem-focusing strategy that has as its primary objective the identification of unsatisfactory situations. In a problem-focused needs assessment, parameters for data gathering become clearer as a specific problem emerges. In this way, the risk of accumulating a good deal of general but not necessarily usable information is reduced. Problem identification in and of itself can prompt action in ways that recognition of goals or deficits may not. For example, problems demand responses because they tend to be inherently puzzling or troublesome. Goals often are so general that they are difficult to operationalize and, therefore, knowing precisely where to begin sometimes proves troublesome. In other instances, goals may be so specific that they do not apply and, therefore, are not of concern to many people.

Because problem-focused needs assessment attempts to iden-

tify unsatisfactory conditions, this process maximizes the tendency for persons to agree on what is not acceptable in cases where what is preferable cannot be agreed upon. For example, most educators are opposed to school vandalism; but not everyone agrees on what should be done about it. Needs assessments that adhere to the problem-focused perspective have a logical sequence, beginning with the identification of problems and ending with recommendations to ameliorate the situations related to these problems. Some have argued that emphasizing problems or unsatisfactory conditions will result in certain kinds of needs (e.g., maintenance) being systematically overlooked (Scriven, 1931). While this is certainly possible, a collaborative process that focuses on issues of concern to a school or district has a greater chance of success because more people with a vested interest become involved. The "problem" serves as a focal point on which persons can concentrate. With resolve, the needs assessment team can remain sensitive to various kinds of needs associated with the problem.

2. Needs Assessment is Continuous.

Needs are not static; they change over time in kind and degree. Therefore, needs assessment should be viewed as a process that can never be completed. It can, however, perform a valuable "feedback" function to guide planning as problems are continuously transformed during the course of examining related information. During this process, priorities may shift, the problem definition may require revision, and so on.

Meanwhile, new information, new ideas, and alternative interventions may merit consideration.

3. Needs Assessment is a Planning Guide.

The purpose of needs assessment is to inform and guide the planning of interventions or programs designed to bring about certain changes. Planning may be thought of as an exploratory response to a problem; it does not end when a plan has been drawn and a problem has been "solved." Pro-active planning on the part of public school personnel requires a continuing series of responses to emergent student and environmental challenges. Change implies improving students' educational experience not merely maintaining the present level. Change usually accrues through a series of small steps. In effect, needs assessment helps educational planners and staff to choose which small step should be taken next.

4. Needs Assessment is Multi-Faceted Data Gathering.

Needs assessment proceeds from a wide-angled view of problems in which many ways of gathering information (e.g., surveys, archival data, individual or group interviews, observations, brainstorming and forecasting techniques, etc.) are used to collaboratively achieve a circumscribed view of problems on which data gathering will be focused. When an acceptable focus is achieved, strategies can be devised to solicit helpful answers to specific problems, thereby making the data gathering more purposeful. This broad view-narrowing sequence then is repeated as new data and new or redefined problems surface.

5. Needs Assessment is a Public, Conscious Activity.

To be politically and logically defensible, needs assessment must be a public and conscious effort to understand the requirements and perspectives of all individuals and groups associated with the problem. This approach requires collaboration -- that is, teachers, administrators, students, and important others such as parents and school board members should work together in a common problem-solving effort. As discussed previously, voting to determine needs is not usually defensible because it usually is not public. A more justifiable strategy uses collaborative decision making and prioritizing through apportioning to achieve a reasoned consensus about how to proceed.

Because it is problem-focused, needs assessment is to be distinguished from strategies that rely primarily on basic research and dissemination campaigns, and from strategies that primarily utilize political power and coercion to serve the purposes of decision makers. Problem-focused needs assessment requires expertise, public involvement, and recognition of the diverse perspectives and values of various groups.

6. Needs Assessment is Value Laden.

The needs assessment process described in this paper requires the participation of a variety of people with vested interests. The difficulty in achieving consensus concerning the issues or problems that demand attention may result from the pluralistic value orientations of these people. Therefore, "needs assessments in any particular setting can have no mean-

ing unless they are tied to local values" (Guba and Lincoln, 1980, p. 3). For example, a minimum competency criterion in one district may not be acknowledged as important in a neighboring district.

Both available knowledge and values must be recognized as legitimate foci of the needs assessment process. In other words, needs do not have an objective reality of their own and therefore cannot be determined through a scientific methodology. Indeed, needs are expressions of values influenced by information (see Guba and Lincoln, 1980, for a more detailed discussion).

7. Needs Assessment is Educational.

Conducting an effective needs assessment in education will result in assessors, planners, administrators and teachers learning more about themselves, their school(s), and their students. Needs assessment results will have greater credibility if, after the process, students as well as the staff involved know more about the school, themselves, the learning environment, and the assessment process than they did at the outset. That is, participants should be kept abreast of the needs assessment design, the preliminary findings, and the consequences of various administrative responses. Participants also should be provided an opportunity to learn how and why a needs assessment is conducted and to experience the complexities of translating findings into action-based alternatives.

Experience has shown that needs assessments that follow a thoughtful action plan often have a variety of side effects

that prove to be beneficial both from an educational as well as a professional development perspective. Furthermore, if a needs assessment is conducted in an open and collaborative manner, the participants in the process--staff, students, administrators, and others--may adopt a different perspective of their school and their relationship to the educational process; that is, they learn more about themselves and their respective roles in the institution. As a result, various groups and individuals may benefit in very personal ways (e.g., increased self esteem and clarity of purpose) that in turn serve to improve the quality of their contributions to the educational, professional, and personal development process. Ultimately, the learning environment in the school is enhanced.

Practical Considerations for Planning and Conducting Needs Assessments

Needs assessment has evolved from informal, subjective judgments on the part of a few individuals to a set of systematic procedures integrated in the planning process. Nonetheless, needs assessment is most appropriately referred to as an "art" because it is not yet known what works best in identifying various types of needs in different types of institutional settings. The major steps in the process are illustrated in Figure 1. The following fourteen questions serve as the framework in which the implementation of a needs assessment strategy can be considered. A thorough discussion of each of these questions is beyond the scope of this presentation. More detailed information is available in selected references listed at the end of the monograph.

1. What is the "problem" or situation out of which needs will emerge?

The impetus for needs assessment often comes from dissatisfaction with an existing situation, where no particular problem has yet been defined or agreed upon, but where there exists a feeling that "something should be done." While the initial focus of needs assessment is on the uncertainty, perplexity, or difficulty that requires action, the identification of appropriate problems is crucial to effective needs assessment. Clearly, if problems are identified that are quite narrow in scope, the needs assessing and subsequent planning

cannot be expected to make much difference. On the other hand, if an overly broad set of concerns is accepted as "the problem," planning may be futile.

The problem should be derived from expressed dissatisfaction with the "way things are." If a problem is not linked to a "rub" (or "challenge," "paradox," or "puzzle"), there may be inadequate support in the system to try and do something about it.

Often the initially identified problem is really a cluster of inter-related problems, each of which may deserve special attention. Staff members in a school building or local school district may perceive things differently and feel frustrated about extraneous or conflicting issues. Such problems require clear delineation if progress is to be made toward identifying and acting on underlying conditions.

As information is gathered during needs assessment, the definition or scope of the problem is likely to change. To invite exploration and to encourage flexibility on the part of planners, problems are best written in a way that enables redefinition and revision. "Open" problems, therefore, are phrased in a tentative manner and elaborated with various "themes of concern" rather than predetermined rules or rigid principles.

The problem itself should suggest logical "next steps." A solution may not be obvious or even called for--all that is required is that there be a series of steps to obtain more information. Rather than identifying a comprehensive solution that may not be timely or applicable, incremental

steps should be identified that assist in focusing on possible resolutions to the problem.

To identify problems of concern, the following modified nominal group process originated by Dilbecq and Van deVen (1968) is suggested:

- a. Working alone, each planning team member defines both a personal and an organizational problem;
- b. Problems are shared, round-robin, and recorded;
- c. New problems suggested by the process are listed;
- d. Problems are discussed and analyzed to reach a reasoned consensus about suitable problems (see Appendix A for a more complete discussion of this process).

The planning team then formulates an action plan to share the results of this preliminary analysis, to check the validity of the problems, and to invite community or system response. The action plan for problem verification should include the following:

- a. Ways to reach representative groups affected by the problem.
- b. "Mini-strategies" (not full-blown strategies as will be used once suitable problems have been identified) to learn more about the school or school system and to gather pertinent information.
- c. Task assignments and time lines.

When the planning team reconvenes, they share new information and new perspectives gained from the problem as necessary.

MAJOR STEPS IN THE NEEDS ASSESSMENT PROCESS

1. Establish needs assessment planning team.
2. Identify problem focus.
3. Develop understanding of organizational context, obtaining necessary support for participation of target population.
4. Verify and refine problem focus.
5. Determine further information needed and methods for collecting and analyzing information using three or more different strategies.
6. Determine resources necessary to implement needs assessment plan.
7. Develop more detailed plan, based on available resources, including time-lines and contingency plans and specific task assignments.
8. Implement needs assessment plan, making any necessary midstream adjustments.
9. Analyze results of needs assessment process.
10. Develop action plan based on results of needs assessment.

Figure 1

2. Is there a "need" for a needs assessment?

In some instances, needs assessments are dictated or required by external audiences (state and other funding sources) or by internal politics and policies. It is important to determine for what purpose and by whom a needs assessment is determined necessary, wanted or demanded. In some situations, the timing for needs assessment may be inappropriate. In other situations, the political climate and level of trust in a building or district may require attention before a needs assessment can be effective. If the motivation for a needs assessment is authentic and legitimate, most rational planning groups can and should decide whether conducting a full scale needs assessment is worth the time and effort in light of the scope and potential pay-offs of the proposed needs assessment project. This step essentially corresponds to a front end analysis (see Datla, 1978) in which an appraisal of the organization's resources and commitment is performed to determine whether the planned activity is worth doing and is likely to be effective as it has been conceptualized.

3. Does the needs assessment team have the support of school administrators?

As previously alluded to, needs assessment is a time consuming set of activities that requires a cadre of committed members representing a variety of stakeholders. However, gaining the support and commitment of decision makers to the needs assessment process is critical to the ultimate success of the project. Without the endorsement and par-

ticipation of central administration and building principals, the needs assessment process probably will result in a futile exercise. In addition, everyone affected by the needs assessment should be kept informed as it progresses. This ongoing communication with relevant groups builds support for the needs assessment itself and paves the way for effective problem resolution.

4. What are the purposes and expected outcomes of the needs assessment?

Different groups may have different perceptions of the purposes of the needs assessment. Consensus around the major tasks for the needs assessment team is crucial. Once reasonable parameters have been identified concerning the scope and function of the needs assessment, the needs assessment team can focus its energies more clearly on an achievable set of objectives.

The needs assessment team should consider the social and organizational context within which the needs assessment will be conducted. The following are suggestive of issues that need to be considered at this point:

- (1) Goals of the organization, as evidenced by the behavior of persons working in the building or district;
- (2) The organization's readiness for change including support from key stakeholders;
- (3) Specificity of desired outcomes and flexibility of the system in dealing with emergent needs;
- (4) Resources available to respond to needs--fiscal,

physical, and human;

- (5) Target groups' awareness of and ability to articulate needs;
- (6) Previous experiences with and reaction of the organization and staff to needs assessment and planning.

One way for the needs assessment team to surface these kinds of issues is to brainstorm a list of conditions in the organization that facilitate or hinder the identified problem and the needs assessment process. To be useful, this list should be as specific as possible. For example, if the school board is considering reducing financial support for staff development, this information must be considered in the planning of a needs assessment around staff development issues. Some questions that may assist in generating additional issues and concerns are included in Figure 2.

5. Whose needs are to be assessed?

At first "blush," this task seems to be fairly straightforward: select the target groups and find out what they need! Yet, within groups may be different subgroups that may have needs substantially different from the larger group. The more people in the target group, the more likely one or more subgroups exist with sets of needs different enough from the larger group to undermine the validity of the findings and the utility of subsequent programs designed based on the results. Therefore, several related issues must be addressed at this point. Is it feasible for the needs assessment team to consider equally the various subgroups?

QUESTIONS TO SURFACE ISSUES AND CONCERNS

Does the local bargaining agreement protect teachers from demands (such as participating in dialogues related to needs assessment) placed on their time outside and/or during regular school hours?

What formats for needs assessment have been used in the past? Does the present plan for needs assessment deviate significantly from this tradition? (An affirmative response to this question may indicate a need for some preliminary efforts to acquaint decision-makers and participants with the new strategy to gain their acceptance and cooperation).

Is there an active parent or advisory group to the school that should be involved at some level to reduce resistance concerning future needs assessments?

What groups, if any, outside the administrative structure (teachers associations, advocacy groups, etc.) have conducted needs assessments in the past? How can the information from those assessments or the groups themselves assist in present needs assessments efforts? What are the potential trade-offs to be made in involving outside groups?

What other requests are being made of teachers and other potential target groups at the same time? Can needs assessment instruments be timed and designed so as to emphasize the importance of careful consideration without putting undue burdens on participants at any one time?

Are there fiscal constraints on how much can be spent on needs assessment at this time? How will these constraints affect the needs assessment plan? Can funds be designated for future needs assessments on a continuing basis?

How do potential target groups view "needs?" Are needs perceived as deficits in professional performance that must be hidden from peers and supervisors to preserve professional competency? Are needs to be acknowledged as areas for growth and development within a general context of accepted professional competency? How readily and objectively can target populations for needs assessment identify current needs?

Figure 2

Are adequate resources available to support smaller scale needs assessments to obtain information from the relevant subgroups?

All members of various subgroups need not be included to obtain an accurate assessment of needs. A series of data collection efforts with representative samples will be more efficient and will probably provide data equally reliable to a more expensive process that includes all personnel. Usually including more than 200 respondents (not the target sample but number of persons who actually participate!) will not be cost effective. Depending on the purpose of the assessment and degree of confidence required in the results, smaller size samples can be used (see Elliott, 1980 for an excellent discussion of this issue).

Also, some thought should be given to the advantages and disadvantages of early identification of the target population. Early determination of individual(s) or the group(s) to be assessed usually results in more efficient and perhaps more economical projects. However, it is possible that a premature determination of target groups may also result in excluding other groups that may have "needs" related to the problem. If the target populations are not identified until the problem is clearly defined, needs assessment may become more complex and costly, but may also reflect existing needs with greater accuracy.

The nature of the problem can often help determine whether to specify the target audiences early or to delay this decision. For instance, a history of continued resis-

tance on the part of building principals to take responsibility for and/or support the child-study process might prompt the needs assessment team to focus early on principals as the target population. However, if a general negative attitude toward the child-study process prevails throughout the school district, it would be inappropriate to focus early in the needs assessment on a particular population.

6. What kinds of needs are to be assessed?

The existence and importance of different kinds of needs were discussed earlier (e.g., incremental, maintenance, and resource needs). The popularity of the discrepancy approach to needs assessment in education has resulted in a good deal of confusion in this area; therefore, considerable attention must be given to this question during the planning of a needs assessment. It seems reasonable to expect that although the assessment team may have difficulty specifying various kinds of needs to be assessed at the beginning, they can remain sensitive to the possibility that different kinds of needs may emerge during the needs assessment process in addition to those they expected.

7. How will the required information be collected?

In spite of numerous caveats to the contrary, many educators continue to rely on the district-wide survey to document needs. There is no question that surveys can be effective and particularly efficient forms of gathering information from a large number of people. But a survey alone cannot document need. In practice, most needs assessments will probably include some form of survey as one component of

the data collection process. Information from interviews, open forums, observations, and existing records (see Houston, 1978 and Appendices B and C) are likely to increase the reliability and validity of the process. In other words, multiple measures will improve the chances that the needs identified are, indeed, legitimate and should be considered by program planners.

Each data collection measure is useful in obtaining different kinds of information from the various target populations. Some use highly structured instruments that require categorical responses. These can be efficiently administered and analyzed but limit the kinds of responses that can be made and important nuances may be lost. Other strategies are more flexible and allow for openended but less systematic responses. Therefore, it is more difficult to summarize findings across respondents.

In addition, the dynamics of implementing each strategy should be considered. For example, interviews require the time of interviewees and interviewers but provide opportunities for clarification of questions and responses with interviewees. Questionnaires on the other hand, require initial staff time in developing or adapting a questionnaire for local use but may be completed individually by respondents at their convenience.

Given the constraints and requirements of the various needs assessment strategies and an understanding of the information objectives of the needs assessment, a decision concerning the most efficient and effective methods of in-

formation gathering can be made at this time.

At this point, the data collection methods should be considered tentative. The methods and strategies to be used must be compared with the available resources to determine their feasibility. After this set of decisions, the needs assessment team moves from an ideal needs assessment design to a revised plan that can be implemented with available resources. A time-line including tasks assigned to specific individuals should be developed to guide the team's activities through this portion as well as later portions of the process (e.g., data collection, analysis, and reporting).

8. Have the data gathering devices been field tested?

By necessity, most needs assessment instruments are "home grown;" that is, they are locally constructed to answer specific questions about the school or district. It is imperative to determine whether the data gathering methods will provide the type of information deemed appropriate. Requesting that a small number of staff complete the instruments prior to mass distribution is a valuable and a necessary step. In most instances, revisions of the data gathering methods and instruments improve the reliability and validity of the process. This step frequently is overlooked even though it is mentioned in almost every substantive discussion concerning needs assessment.

9. Is the desired information being collected?

If the eight preceding questions have been adequately answered, this question usually is moot. However, during the needs assessment process, a variety of issues may surface that

underscore additional points of interest or illuminate different kinds of needs not previously considered. It must be emphasized that needs assessment should not be viewed as a lock step process. Unexpected findings relevant to the problem often surface. These should be considered as potentially useful and subsequently could result in other questions or groups being included in the process. The point is simple but noteworthy: the needs assessment team must remain open and responsive to information generated during the needs assessment, whether it be from the data collection process or from political statements by various stakeholders. This information can prove quite valuable later when interpreting and drawing implications from the findings. Periodic checks may be necessary to make certain that the information being collected is consistent with what was intended to be collected and that these data are relevant to subsequent steps in the assessment process.

10. How will the data from the needs assessment process be analyzed?

The methods used to collect information will determine to some extent the analysis to be used. Too often, however, team members unfamiliar with more sophisticated analyses find summary information presented in highly technical formats difficult to interpret. If people within the team or district are not available to help interpret computer printouts and the like, the team should either seek external assistance or avoid their use. In many instances, elaborate statistical compilations may not be necessary nor useful for the needs assess-

ment team but may be viewed as necessary for continued credibility with central administration.

In addition, it is frequently difficult to integrate different kinds of information from different respondent groups. For example, how can information from a survey questionnaire be combined with interview or observational data from administrators? Usually the combination of statistical treatments of data with rich, descriptive material from students, teachers, and administrators will prove most useful in subsequent planning.

11. What are the implications of the needs assessment data?

One aspect of this question refers to how the available resources should be allocated to meet the identified needs of various groups. These are difficult decisions and the best that can be done with existing technology is to use good judgment mixed with input from the stakeholders when the available resources are distributed to meet needs. Of course, contextual factors such as political, social, and economic climates as well as calendar year considerations (timing) are variables of great import. Interpretations of the results should be made from several different perspectives as various audiences or constituencies will be affected in different ways by the results and have different roles to play in the planning process.

12. Are the results of the needs assessment communicated in the appropriate forms to various stakeholders?

After substantial numbers of weeks, and sometimes months, involved in what may have been a complex and difficult set of

activities, the temptation is great for a needs assessment team to produce a thick document with many tables of information. Unfortunately, most staff are not interested in immersing themselves in such a report but prefer to learn as quickly as possible the relationship of the findings to themselves. This limitation seems to be relatively easy to remedy, provided the reporting vehicle is guided by the following principle: whatever is reported through whatever media (written, oral, story telling, pictures, etc.) should increase the consumers' understanding of the needs assessed during the process, and the process itself. In other words, needs assessment reports should address: (1) the pluralistic value orientations of different stakeholder groups in the organization; (2) the original purpose of the assessment and any purpose and objectives added during the process; (3) the procedures used to assess needs; (4) how the findings are to be used; and (5) the contextual factors that will influence the interpretation of the findings and the implementation of programs subsequently designed to address the identified needs.

13. Have the needs assessment data, implications, and recommendations been integrated into the planning process at the district, building, and individual staff member levels?

This is the most critical question, the "bottom line" of needs assessment activities. For the findings to influence planning, all of the above questions will have to be raised in an open and collaborative manner and, as emphasized earlier, interest in the needs assessment process on the part of

decision makers should be encouraged at the outset of the needs assessment. To date, there is a dearth of case studies that report changes in planning processes, policies, and programs based on needs assessment findings. Given the recent flurry of interest in needs assessment, more detailed information about the utility of needs assessment data probably will be available soon and, hopefully, will provide insights as to how needs assessment data can be more effectively and efficiently incorporated in program planning.

14. Are the target groups being monitored to document the continuing validity of the identified needs?

A comprehensive needs assessment may take many months from start to "finish." However, needs change over time in kind, form, degree, and relative importance. Some monitoring is required to make certain the needs identified during the data collection are consistent with those that should be addressed by subsequent planning. It is likely that many needs assessments are judged to be ineffective because needs increase, diminish, or change between the time the original needs assessment data are gathered and programs are generated to meet these "needs." Also it is difficult to maintain the required level of staff enthusiasm and energy to continue the process beyond what seems to be a traditional terminating point. Nevertheless, this is a critical step and one that is overlooked too often.

These fourteen questions suggest that needs assessment

is a very formal, time consuming, and expensive process. In some cases, this will be true particularly in those situations in which the needs of many staff are to be assessed or when the relative economic and social costs and benefits of the needs assessment are great. However, the principles on which these questions are based can be addressed daily by a staff member in a much more informal way. This is not to advocate that snap judgments or an individual staff member's opinions can take the place of a comprehensive, well planned effort to assess needs. But, after becoming familiar with a formal needs assessment process and its underlying principles, it seems likely that many staff will be able to adopt some variation of the steps involved and apply them in their own specific setting. A sample application of a problem-focused needs assessment process is included in Appendix D.

Skills and Staff Required for Assessing Needs

As mentioned earlier, broad scope or more comprehensive needs assessments require a team. To conduct an effective needs assessment, the members of the assessment team should exhibit certain competencies so that the following skills are represented by the team:

Process consultation skills (small group process, nominal group process, etc.);

Interview techniques (in person and telephone);

Unobtrusive data collection technique such as observation;

Management of organizational change.

Other areas of expertise often required for a needs assessment process usually can be found within the district. Central office research and evaluation staff often can provide assistance with such tasks as instrument development, sampling, and statistical treatment of data.

Though the technical and interactive skills of the needs assessment team members are important, they should not be the only considerations in team selection. Those selected should represent a broad cross section of the relevant groups in the district to build credibility and trust of the needs assessment process and results, and to provide access to the groups who may participate in the needs assessment. Again, team members' commitment to and trust in the team and its work will be the foundation upon which the program designed to meet those needs will be accepted. Also, a cross section of personnel will enhance the team's sensitivity to issues and concerns of specific groups in the district that might otherwise go unnoticed. This greater understanding of contextual issues will allow the team to plan a more effective needs assessment.

CONCLUSION

Much of what is required for a successful problem-focused needs assessment cannot be provided by a manual or workbook. Rather, the persons responsible must use their best judgment and foresight in making the process work. Though creativity, hard work, and common sense have been underemphasized throughout the preceding discussion, they are crucial to developing an effective needs assessment.

Needs assessment is a continuous, problem-focused process that employs a variety of data gathering strategies. Needs assessment should guide planning and not vice versa. As a public, conscious activity, everyone (administrators, teachers, students, parents and taxpayers) either directly or indirectly will learn from the process as well as from the results.

Though it is important to plan and carry out a needs assessment that will yield valid and reliable information about needs, too often planners have failed to recognize the importance of the needs assessment process itself. Indeed, authentic needs may be very elusive and difficult to identify with any confidence during the first round of needs assessment. Establishing an ongoing needs assessment process into the school system allows for continuous refocusing on needs and refinement of planning to meet those emerging needs.

A needs assessment process that involves a variety of school personnel at various stages has benefits beyond the

data that are collected. Involvement in problem identification may lead to achieving consensus within the district about the problems that need to be addressed. A needs assessment can assist in developing a shared sense of ownership in the planning process so that solutions emerge with a broad basis of support required for successful implementation. Needs assessment can assist in informing the general public about issues of concern in the schools. Needs assessment provides opportunities for participants to develop understanding in a variety of areas including data gathering techniques, group processes and problem-solving, and dissemination of information. Needs assessment provides an opportunity to experiment, learn, teach and model an adaptive, responsive approach to planning and program development. Needs assessment lays the groundwork for implementation of a plan by creating interest in the problem, increasing the credibility of the planning effort and building support for an action plan to address needs.

References

- Caffarella, R.S. Needs assessment. Orono, Maine: University of Maine, College of Education, 1978.
- Datla, L.E. Front-end analysis: Pegasus or shark's mare? In S. Anderson and C. Coles (Eds.), Exploring purposes and dimensions. San Francisco: Jossey-Bass, 1978.
- Dilbecq, A.L., & Van deVen, A.H. A group process model for problem identification and program planning. Journal of Applied Behavioral Science, 1971, 7, 446-491.
- Elliott, B. Sizing the sample (without laundering the data). CEDR Quarterly, 1980, 13(2), 10-12.
- Guba, E.G., & Lincoln, Y.S. The place of values in needs assessment. Bloomington, IN: School of Education, Indiana University, 1980.
- Houston, W.R., et. al. Assessing school/college/community needs. Teacher Corps Development Training Activities, 1978.
- Kaufman, R.A. Educational system planning. Englewood Cliffs, NJ: Prentice-Hall, 1972.
- Kuh, G.D. A comprehensive overview of needs assessments in student affairs. Bloomington, IN: School of Education, Indiana University, 1980.
- Kuh, G.D., Hutson, H., Orbaugh, T., & Byers, K. Designing a problem focused needs assessment. Bloomington, IN: National Inservice Network, 1979.
- Lenning, O.T. Needs as a basis for academic program planning. In R.B. Heydinger (Ed.), Academic program planning. San Francisco: Jossey-Bass, in press.
- Lenning, O.T., & McAleenan, A. Needs assessment in student affairs. In G.D. Kuh (Ed.), Evaluation in student affairs. Cincinnati: ACPA Media, 1979.
- Scriven, M. How to do a needs assessment. Workshop sponsored by Capitol Publications, Chicago: November 1978.

Scriven, M. (Ed.), Book notes. Evaluation Notes, March, 1981 (2,3).

Scriven, M. & Roth, J. Needs assessment: Concept and practice. In S. Anderson and C. Coles (Eds.), Exploring purposes and dimensions. San Francisco: Jossey-Bass, 1978.

Stufflebeam, D.L. Needs assessment in evaluation. Paper presented at the meeting of the American Educational Research Association, Evaluation Conference, San Francisco, September 1977.

Appendix A
Nominal Group Process Technique

(Taken from R.S. Caffarella, Needs Assessment.
Orono, Maine: University of Maine, College
of Education, 1978)

NOMINAL GROUP PROCESS TECHNIQUE

The Nominal group technique was developed by Andre L. Dilbecq and Andrew H. Van deVen in 1968. It is basically a group process model for problem identification and problem planning. The technique employs a planning sequence which seeks to provide an orderly process of structuring the decision-making at different phases of planning. For more information refer to Group Techniques for Program Planning.

Conducting the Nominal Group Technique (NGT):

Design Tasks:

Prepare the NGT question

Staff clarifies objectives

Illustrates desired items in terms of level of abstraction and scope

Prepares alternative forms of an NGT question

Pilot-tests to select the question to be used

Print the NGT question on nominal group worksheets for each participant

Select the rating method suitable to the task

Preparing the Meeting Room:

Table Arrangement:

Table arranged as an open "U" with a flip chart at the open end of the table

Sufficient space between table to avoid interference

Supplies:

Flip chart for each table and for the leader

Roll of masking tape

Nominal worksheets and pencils for each participant

3 X 5 index cards (for ranking): rating forms (for rating)

Felt pens

Introducing the Meeting:

Welcoming Statement:

Cordial and warm welcome
Statement of the importance of the NGT task
Clarification of the importance of each group members' contributions
Statement of the use or purpose of the meeting output

Conducting the Nominal Group Process

Step 1: Silent Generation of Ideas in Writing

Present the nominal question to the group in writing
Verbally read the question
Illustrate level of abstraction and scope desired with example which does not distort (lead) group responses
Avoid other requests for clarification
Charge the group to write ideas in brief phrases of statements
Ask group members to work silently and independently
Model good group behavior
Sanction description of the silent, independent activity by comments addressed to group as a whole

Benefits: Provides adequate time for thinking
Facilitates hard work by the model of other group members reflecting and writing
Avoids interrupting each other's thinking
Avoids premature focusing on single ideas
Eliminates dominance by high-status or aggressive members in idea generation
Keeps the group problem-centered

Step 2: Round-Robin Recording of Ideas on a Flip Pad

Process: Provide clear instructions concerning the step:
Indicate objective of the step is to map the group's thinking
Explain need to present ideas in brief words or phrases
Explain process of taking one idea serially from each member
Explain group members must decide if items are duplicates
Explain that an individual may "pass" when he has no further ideas but may "re-enter" later
Express the desirability of adding new ideas even though they are not on individual work-sheets

Explain inappropriateness of discussion prior to completion of listing
Quick, effective mechanical recording:
Record ideas as rapidly as possible
Record ideas in the words used by group members
Provide assistance in abbreviating only in special situations
Make the entire list visible by tearing off completed sheets and taping them on an area visible to all group members
Sanction group as a whole if individuals engage in side conversations or attempt to discuss items prior to completing the listing

Benefits: Equalized opportunity to present ideas
Assists in separating ideas from personalities
Provides a written record and guide
Place conflicting ideas comfortably in front of the group
Forces the group to fully explore the problem

Step 3: Serial Discussion for Clarification

Process: Verbally define the purpose of the step:
To clarify the meaning of the items
To explain reasons for agreement or disagreement
Indicate the final judgments will be expressed by rating so arguments are unnecessary
Pace the group so that all ideas receive sufficient time for clarification
Avoid facing the member who originally lists the idea to be solely responsible for clarifying the item

Benefits: Avoids having discussion focus unduly on any particular idea or subset of ideas
Helps eliminate misunderstanding
Provides opportunity to express the logic behind items
Allows members to disagree with argumentation

Step 4: Preliminary Vote on Item Importance

Process: Ask the group to select from the entire list a specific number (7 plus or minus 2) of priority items:

Place each priority item on a separate 3 X 5 card or rating form
Rank-order or rate the selected priority items
Collect the cards or rating forms and shuffle them to retain anonymity

Tally the ratings and record the results on the trip chart in front of the group

Benefits: Obtaining independent judgments in writing helps eliminate social pressures
Expressing judgments mathematically by rank-ordering or rating increases accuracy of judgments
Displaying the array of individual rates clearly highlights areas needing further clarification or discussion

Step 5: Discussion of the Preliminary Vote

Process: Define the role of the step as clarification, not pressure for consensus
Keep the discussion brief
Caution group members to think carefully about any changes they make in their rating

Benefits: Provides group members a final opportunity to clarify their positions
Ensures "spread" votes really reflect differences in judgment, not unequal information or misunderstanding

Step 6: Final Vote

Process: (Repeat Step 4)

Benefits: Accurate aggregation of group judgments and error reduction
Closure to the meeting.

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1978

Appendix B
Needs Assessment Instrument Categories

(Prepared for the 1978 National Dissemination Forum
by Martha Williams, the NETWORK, Andover, Massachusetts)

Instrument Categories

Active Listening

In the active listening approach, clients/consumers are sought out to discuss their situation. The data collector explains that the discussion is intended to illuminate needs (system wide, individual or both) and encourages the respondent to present his or her view of needs. The data collector asks only probing and clarifying questions and records the discussion on audio tape or in extensive notes.

Structured Interview

Structured interviews contain specific questions asked of all respondents. Usually the interview has approximately fixed length; the data collector has the list of questions and may or may not share them with the respondent. The questions are presented in sequence; appropriate probing questions are often anticipated on the interview protocol sheet. If the respondent strays from the question, the data collector may disregard that information. If the questions are not relevant to the respondent, limited opportunity is provided for restructuring them.

Data are usually recorded on a form; interviews may be audio-taped as a secondary source of information.

Questionnaire

The questionnaire can be relatively client centered or system centered, depending on its approach. It may include

questions which address needs directly, such as "Do you need help with _____?" or it may ask for information only indirectly related to the respondent's perception of need, such as "Do students in your class receive individualized assistance with reading?" In the latter case, the information-seeking question may be followed by a more open-ended question, such as a "why" question. These may require a forced choice response (selection of one response from four or five options).

The questionnaire can probe information, opinions, or attitudes. Because it is a paper-pencil technique, instructions are usually contained on the questionnaire form and little guidance or encouragement is given for expanding the boundaries of the instrument. It can be administered individually or in large groups, through the mail or in person.

Checklist

A checklist, like a questionnaire and structured interview, can contain items directly related to need (such as a checklist of need areas) or items indirectly related to needs, such as a checklist of characteristics of the respondent, or both. The respondent makes forced choices, but generally within a fairly extensive group of alternatives. The choices are usually not forced down to one; usually there is provision for several responses to be checked, often for the responses to be prioritized. Also checklists can be used to codify archival data (information routinely

collected from various individuals in the system such as nurses, bus drivers, etc.)

Observation

The most system centered form of data collection is observation because it involves no direct input from clients. Data collectors using observation guidelines go directly to the site of activity and record what they see and hear within coded or structured data collection formats. This technique is the most system centered because it dictates a perspective from which the clients' reality is viewed; and because of the lack of interaction, the perspective cannot be challenged by the subjects.

Appendix C
Needs Assessment Methodologies

OBSERVATION

Use observation when:

1. First hand experience is required.
2. Respondents may not be able to relate directly needed information.
3. Budget allows for observers time required for lengthy observations.
4. Sufficient time in the needs assessment plan is available to make reliable observations.

Major Steps:

1. Determine format for observation including
 - a. Extent to which observation guide is structured prior to observations.
 - b. Extent to which observer is or is not a participant in the activity being observed.
 - c. Extent to which the observational situation is natural or contrived.
 - d. Extent to which subjects are aware of observer's role and purpose.
2. Identify site or observational situation.
3. Gain access or permission to observe -- establish an agreement.
4. Take overt or covert role of observer.
5. Establish trust and rapport (may not be necessary if observation is unobtrusive).

6. Record observations using one or more of the following:
 - a. Predetermined schedule or checklist.
 - b. Notetaking in narrative form.
 - c. Tape record observations as they occur.
7. Analyze observations through focusing and categorizing process.
8. Write report summarizing observations.

For further information about observational techniques:

Bogdan, R., and Taylor, S.J. Introduction to qualitative research methods. New York: Wiley, 1975.

Jahoda, M., Deutsch, M., and Cook, S.W. Research methods in social relations. New York: Dryden, 1951.

McCall, J., and Simmons, J.L. Issues in participant observation. Reading, MA: Addison-Wesley, 1969.

QUESTIONNAIRES

Use a questionnaire when:

1. Wide distribution is necessary (and budget will not permit telephone interview).
2. A sense of privacy is needed.
3. Complete uniformity in the manner in which questions are posed is necessary to avoid biasing responses.
4. Presence of interviewers are likely to affect responses.
5. Respondent needs to secure or check information.
6. Obtaining unanticipated definitions of situations and quantifiable responses is not desired.
7. Self administration and logistical ease is desired.
8. Cost must be kept at a minimum.

Major steps

1. Specify information to be gathered.
2. Frame questions to be included.
 - a. Clear and understandable.
 - b. Logical sequence.
 - c. Spacing and format making type of response clear.
 - d. Pretest questionnaire and modify if needed.
3. Determine to whom and how questionnaires will be distributed and how a high return rate will be effected.
 - a. Distribute and collect at meeting of respondents.
 - b. Self-addressed stamped envelope for return.

4. Compile results of questionnaire and summarize.

For further information about questionnaire and survey techniques:

Oppenheim, A. Questionnaire design and attitude measurement.
New York: Basic Books, 1966.

Hyman, H. The interview in social research. Chicago: University of Chicago Press, 1954.

INTERVIEWS

Use interviews when:

1. It is necessary to observe not only what a respondent says but how (e.g., evasive, reluctant) it is said.
2. Target audience.
3. It is necessary to build up and maintain rapport to keep respondent interested and motivated to finish questions.
4. High participation by target group is needed.
5. Population is accessible.
6. Supplemental information may be needed for respondent's understanding and to prevent misinterpretation of the questions.
7. Budget will allow for expense of this method.
8. It is necessary for respondent to react to visual materials.
9. Spontaneous reactions are necessary with sufficient time and probes to recall relevant information.
10. Information about the respondent's personal characteristics and environment are needed to interpret results and evaluate the representativeness of the persons surveyed.
11. There are time and resources to properly train and supervise interviewers (otherwise data recorded may be inaccurate or incomplete).

Major Steps:

1. Specify focus of interview -- information to be gathered and target audience characteristics.
2. Establish time frame and identify interviewers.
3. Develop questions to be included in interview.
 - a. Motivating for respondent to answer.
 - b. Give the respondent a "stake" in the interview (e.g., chance to influence change).
 - c. Be prepared for interview.
 - d. Establish rapport.
 - e. Record responses using respondents own words.
 - f. Be prepared to probe for clarification, amplification, etc.
 - g. Summarize major points at end as a check.
4. Analyze and evaluate each interview as soon as it is completed.
5. Compile information from series of interviews using categories of response and write a summary.

For further information on interviewing techniques:

Bingham, W., and Moore, B. How to interview. New York: Harper, 1959.

Gordon, R. Interviewing strategies, techniques and tactics. Homewood, IL: Dorsy, 1969.

Loflan, J. Analyzing social settings. Belmont, CA: Wadsworth, 1971.

Richardson, S.A., Dohrenwend, B., and Klein, D. Interviewing: Its forms and functions. New York: Basic Books, 1965.

Wolf, R. Strategies for conducting naturalistic evaluation in socio-educational settings. Occasional Paper Series of the Evaluation Center, Western Michigan University, 1979.

Merton, R., Fisk, M., and Kendall, P. The focused interview: A manual of problems and procedures. Glencoe, IL: Free Press, 1956.

ARCHIVAL MATERIAL

Use archival material when:

1. Appropriate records are easily and legally accessible.
2. Budget limits the use of more expensive data gathering methods.
3. Time and space restrictions do not permit direct access to target population.
4. Naturally occurring data from the target setting are desired as opposed to more contrived data from interviews, questionnaires, etc. "Let the record speak for itself."
5. Information is needed to supplement and substantiate information obtained through interviews and other methods.
6. Potential errors in records can be recognized and dealt with through other needs assessment techniques.
7. Comparisons across record-keeping systems are feasible (similar formats, language, type of information).
8. Repeated measures of values, attitudes, etc. are desired over time.

Major Steps:

1. Determine data desired from records.
2. Determine appropriate sources of data. Random stratified or purposive sample of available docu-

ments is preferable.

3. Contact persons in charge of appropriate records and gain access to records.
4. Review records for desired information using document analysis techniques. More than one judge is desirable for subsets of documents.
5. Summarize information obtained from each record or document with attention given to issues of completeness and accuracy.
6. Collapse information across records using emergent categories to gain more general picture.

Some possible sources of archival material include:

1. Official reports and documents
 - Student achievement records
 - evaluation of teachers
 - building administrators' reports
 - central administration reports on particular programs
 - school board meeting minutes
 - grant applications and proposals
 - library check out records
 - bus driver reports
2. Unofficial and personal records
 - teacher lesson plans and diaries
 - student written materials.

For further information about archival material, consult:

Anderson, D., and Benjaminson, P. Investigative reporting.
Bloomington, IN: Indiana University Press, 1976.

Guba, E. "Toward a Methodology of Naturalistic Inquiry
for Educational Evaluation," CSE Monograph Series No. 8.
Los Angeles: UCLA, Center for the Study of Evaluation, 1978.

Holsti, O.R. Content analysis for the social sciences and
humanities. Reading, MA: Addison-Wesley Publishing Co.,
1969.

Williams, P.N. Investigative reporting and editing. Engle-
wood Cliffs, New Jersey: Prentice Hall, 1978.

Appendix D

Case History of a Problem-Focused Needs Assessment:
Littleton, Colorado

LITTLETON COLORADO NEEDS ASSESSMENT PROCESS*

Demographic Characteristics

Popularly known as "The Littleton Schools," the Arapahoe County School District Number Six encompasses an area of 28 square miles bordered by Bellevue Avenue on the north, Holly Street on the east, the Douglas County Line on the south, and the Jefferson County Line on the west.

The population of the district is 57,000 or 34 percent of the total of Arapahoe County. Ninety-eight percent of the population is Caucasian with less than two percent being Black, American Indian, Oriental, or having Spanish surnames. The average income of the residents places Arapahoe County as one of the two wealthiest in the state. The average number of school years completed by Littleton residents is 12.5. Approximately 25 percent of the work force residing in the district are classified as professional/managerial, 50 percent are service oriented occupations and 25 percent are jobs compensated by an hourly wage. Less than one percent of the families within the district receive welfare assistance.

There are 23 schools in the Littleton District -- three senior highs, four junior highs and 16 elementary schools (including the one to open in September, 1979). The rate of growth has varied from a high of 30.6 (1956) to less than one percent. Pupil enrollment includes approximately 8,400 ele-

*Littleton, Colorado (Arapahoe Co. School District Number Six) was one of six local school districts in Colorado selected to serve as a National Inservice Network demonstration site for (REGI) Regular Education Inservice.

mentary students, 4,600 junior high students, and 4,600 senior high students. It is estimated that about 35 percent of the area within the district is yet to be developed with a potential school population of 24,000. The growth rate is currently stable.

Special Educational Program

The Arapahoe County School District Number Six Special Educational Program is detailed in the district's Comprehensive Plan Policies and Procedures. It adheres to the Handicapped Children's Educational Act (Colorado Revised Statutes 1976, Title 22, Article 20) and the Education of All Handicapped Children's Act as amended by P.L. 94-142.

The programs for service delivery are noncategorical and staffed by certificated professionals including support personnel. Every school has a resource room program to serve the building's mild to moderately handicapped students on both a direct service and consultative basis. Self-contained programs for severely educationally handicapped, severely language impaired, significant limited intellectual capacity, hearing impaired and multiple handicapped students are available and housed throughout the district. Itinerant programs are offered in the area of physical, hearing, visual and speech handicaps. Work-experience study and home/hospital services are also available. Individual Educational Programs (IEPs) are written for each student served by special education detailing the current functioning, needs, goals and objectives and least restrictive environment for the particular child.

Proposal Development Process

This proposal was developed in accordance with the problem-focused needs assessment process suggested by the National Inservice Network (NIN). Arapahoe County School District Number Six, Littleton, became involved with NIN by sending the Superintendent of Schools, Executive Director for Instructional Support, and Director of Special Services to an informational meeting during the fall of 1978. These administrators expressed both interest in being a model project and a felt need for improvement for the district's implementation of P.L. 94-142. Considerations supporting their interests included:

1. The NIN Project related directly to state district priorities such as:

The commitment to cooperation between regular and special educators in implementing programs for handicapped students and

The need for continuous inservice training in the district due to low turnover in staff and large numbers of career teachers.

2. Further, the district's involvement was based on staff interest which has grown since the development of a Teacher Center Proposal submitted in the spring of 1978. Although this proposal was not funded, one of the highest ranking staff needs reported in the Teacher Center proposal -- assistance in working with handicapped students in the classroom -- remains a source of concern.

3. The district's administration has also indicated support for the NIN process which they feel is applicable to developing inservice programs to meet other staff training needs.

In November, 1978, the district's Director of Special Services and a representative from the Littleton Education Association (the teachers' bargaining unit) attended a further meeting at which time the Littleton District was chosen as a NIN project site. Following Littleton's selection, a Planning Task Force was identified. The task force, composed of 13 volunteers from the teaching staff and administration, represents a broad spectrum of the district. Members include special educators, regular classroom teachers and two building principals; all levels, elementary to senior high, and various teaching fields are represented. All eleven teachers on the task force are members of the Littleton Education Association, giving a uniquely strong teacher voice in the planning process. The Director of Special Services and the Executive Director for Instructional Support serve as ad hoc members of the task force.

Over a period of six months (January-June, 1979) this task force has worked collaboratively to develop this proposal by following six steps.

1. Development of a problem statement.

After discussion of the strengths and weaknesses of the district's services for handicapped students, the following problem statement was drawn up:

"The lack of effective communication among all involved in

the total implementation of the district's program for exceptional children."

Communication encompassed knowledge of the law, understanding of the district's policy/procedures, cooperation between regular and special education personnel in implementing the program, developing access skills and techniques for working with students, and improving attitudes toward all of these issues.

2. Validation of the problem statement (See detailed information in Needs Assessment Section).
3. Publicity activities to create awareness of the project within the district.

As in many districts, the feelings toward inservice in general tend to be negative. Although the importance of inservice activities is expressed, past inservice programs have often been viewed as ineffectual and not responsive to the needs of the teachers. Given this attitude, the task force felt a need to create awareness and support within the school community. This was accomplished in several ways:

Written communications in various forms were sent out early in the process detailing the NIN process, the district's involvement and task force progress, in addition to listing the staff support of these efforts. Publications included articles in the district staff newsletter (CONTACT), the Littleton Education Association newspaper, the district's media newsletter and informational fliers sent to all staff. As the process has continued update information has been sent out periodically.

Verbal reports have also been given to the Superintendent of Schools and principals on a regular basis by task force members. The Board of Education has been given periodic updates. Efforts have been expended in these areas because the task force has recognized the necessity of gaining the cooperation of these individuals through their understanding and support of this proposal.

Throughout the process other defined groups were allowed the opportunity to give informed input and periodic reports of the task force progress. The groups include members of the Superintendents Teachers' Advisory Council and Special Services building chairpersons, the community members of the Colorado Association for Children with Learning Disabilities, and parents and staff members of the Special Services Advisory Committee.

4. Formal needs assessment (see detailed explanation Section III).

5. Review of research, ongoing projects and available resources.

Throughout the process, the task force has made extensive use of the resource materials and services provided by NIN. Task force members have studied and attempted to apply the concepts included in the materials, such as information regarding the role of change agents, the steps of acceptance of innovations, the design and implementation of needs assessments and best practices in inservice education.

Following Littleton's formal needs assessment, the task force members also reviewed the abstracts of ongoing projects which appear to address the district's identified needs. In addition, one task force member attended NIN's regional meeting of project directors to gain more information about their projects. As the process continued the task force identified three ongoing projects which appeared to be directly relevant to this proposal. The directors of these projects -- Margaret Dyer, Monroe County, Bloomington, Indiana; Barbara Fowler, University of Colorado, Boulder; and Natalie Hedberg-Davies, University of Northern Colorado, Greeley, were contacted by telephone or mail to obtain specific information, advice, and materials. In addition, the task force compiled a partial list of district resources which could be utilized in implementing Littleton's project. District personnel with areas of particular expertise as well as available district services were listed. Resources from the Southeast Board of Cooperative Services, Colorado Education Association, National Education Association, and Community mental health agencies were also noted.

6. Collaborative Development of the Project.

This proposal is the result of collaborative planning between staff and administrators and between regular and special educators. As explained earlier, the task force which developed this proposal is representative of the district as a whole. During this process, the task force

used a consensus decision-making process with no member or group of members dominating the discussion or decision-making. The task force met on a regular basis for 15 full-day sessions and numerous sessions after school. The district provided released time for each member for all of the full day meetings as a tangible show of support. In addition, the district provided secretarial and technical assistance. Minutes were kept of all meetings.

NEEDS ASSESSMENT

Needs Assessment

The assessment of needs for this proposal is considered an ongoing process. The information presented here details the multifaceted approach taken to develop the proposal. Attempts were made to use various techniques in order to allow input from the broadest possible spectrum of the school community. However, the task force acknowledges that needs will change during the span of the project and that continued needs assessment will necessarily be an important part of the project itself. To this time, four stages of the needs assessment have been completed.

Development of a Problem Statement

In an effort to concisely identify the district need for continued improvement of services to handicapped students, the task force developed this problem statement:

"The lack of effective communication among all involved in the total implementation of the district's program for exceptional children."

Since the district special education program emphasized placing students in the "least restrictive environment" according to their needs, most handicapped students spend some portion of their school day in their regular educational programs. Thus, cooperation between regular and special educators is extremely important for implementation of the program. In this statement, "effective communication" is broadly defined to include knowledge, skills and attitudes relating to work

with handicapped students.

Validation of the Problem Statement

Design

To affirm the validity of the problem statement developed by the task force, an informal two question interview protocol was used:

1. What is your main concern with the implementation of the district's total special services program, including mainstreaming?
2. What factors led to this concern?

Administration

Each task force member was assigned one school and was to contact a minimum of ten staff members. The respondents were to include the building principal, the special services chairperson and a cross section of the remainder of the staff. Any additional staff member who asked to respond was allowed to do so.

The interviews were positively received and staff members were willing to cooperate. The task force contacted 125 respondents from over half the schools in the district. In addition, responses were received from the Special Services Advisory Committee (staff, parents and community members), the Superintendents Teachers' Advisory Council and Members of the Colorado Association for Children with Learning Disabilities (primarily a parent group).

Results

Results indicated that the original problem statement was validated. Responses from school to school and group to group were similar in their concerns. The concerns included:

1. Lack of knowledge of the law.
2. Confusion over district procedures, programs, staff.
3. Problems with the support services.
4. Poor transition between special and regular classes.
5. No time for joint planning program development meetings.
6. Attitudes of staff and student peers.
7. Inadequate training/skills for dealing with special students in regular classrooms.
8. Class size.
9. Confusion over curriculum for handicapped students.
10. Cost effectiveness of program.

General Broadcast Survey

Preparation

When developing a formal needs assessment tool, the task force agreed on the importance of getting input on needs from the total staff. In addition, the task force expressed concern that the information be gathered in a thoughtful manner. To ensure positive reception among staff and to gain cooperation in response to the needs assessment, a flier was sent to all certified personnel in the district.

Design

The task force felt a need for direction in designing the instrument. The district's Director of Research and Development was contacted and provided technical information in terms of structure, length, time limits and statistical analysis. These guidelines were strictly followed.

After reviewing past needs assessments in the district and samples provided by NIN and the National Education Association, the task force designed a 20-item questionnaire. This survey was based on the sample by Charles Henley, Michigan State University. This survey was modified and adapted to the areas of concern noted during the validation survey. Each item was stated in an unbiased manner and respondents were asked to respond on a single, four-point scale (none/little/much/great) as to their degree of interest, need to receive information or effect change regarding each item. Separate scales were not used for need/interest/change in that the task force felt any of these motivators would attract participants to activities dealing with the particular concern.

In addition to these concern areas, items were added to gain information on level of assignment and experience in working with handicapped students. A cover letter was drafted in which respondents were asked to voluntarily provide their name and telephone number if they were willing to be contacted for further information.

Administration

The task force felt the administration of the survey

should be carried out in a manner which would afford consistency across the district and ensure high return of responses. Originally the task force had planned to personally present the survey at each building. Due to time constraints, however, it was decided that each building principal would present the survey to the building faculty. Only at the request of principals did the task force send a representative to administer the survey. The procedures for administration of the survey were outlined on the function sheets and explained to the principals at a meeting.

In elementary buildings the survey was conducted during faculty meetings. Time was provided in these meetings for explanation and response to the survey; surveys were collected at the end of the meeting. In the secondary schools, principals explained the surveys to the building faculty council or department chairpersons. These individuals then administered the survey within their individual department meetings. All certificated staff were contacted for response in these ways.

Results

Responses were received from 80 percent of the staff. The responses were hand tabulated for all responses. The responses indicated "much" or "great" needs/interest/desire for change were combined and assumed to indicate a favorable response. Percentages of favorable response were then determined for each level (elementary, junior high, senior high).

Items receiving over 70 percent favorable responses across all three levels are indicated on the chart on the following page.

<u>Item No.</u>	<u>Percent of favorable response</u>	<u>Topic</u>
15	77	Assisting regular classroom teachers to improve the education of handicapped students.
18	76	Correlation between class size and the programming of handicapped students.
9	75	Effective techniques for integrating handicapped students into regular classrooms.
11	73	Development of an effective communication system among regular education, special services, and administration.
13	73	Making effective use of district-wide support personnel.
6	71	Effective procedures for identification, referral and placement of handicapped students.
12	70	Alternative environments for providing services to handicapped students.

Additionally, over 80 percent of the respondents had worked with handicapped students in their classrooms within the last five years. (For total percentage of favorable response to each item see Table 1, page 88.

Approximately 20 percent (195) of the respondents supplied their names and telephone numbers indicating willing-

ness to provide additional information. These respondents included 54 elementary staff, 63 junior high staff and 76 senior high staff members.

All staff were informed of the results of this survey and thanked for their response in a flier.

Discussion

During the course of this phase of the needs assessment, the task force encountered one problem which resulted from the fact that the survey was not pretested. It was found that the instructions to respondents were ambiguous. Respondents were confused in responding to their needs versus interest versus desire to effect change. Several principals contacted task force members for clarification. The rationale for the design was explained and principals were told to instruct their staff to mark according to degree of feeling, whether it be need/interest/change. Further, the task force found that respondents tended to be more willing to provide their names and telephone numbers when the survey was administered by a task force member.

Telephone Survey

Design

This phase of the needs assessment process was designed to gain more indepth information in the area of concern identified as most important (above 70 percent favorable response) on the General Broadcast Survey. In addition, preferences for incentives, time for scheduling activities and format

were included to gain specific direction for planning the program activities.

A questionnaire was constructed to be administered over the telephone. Major sections included introductory paragraphs, identifying information, (name, level of position, school, grade/subject), and items dealing with specific areas of need in working with handicapped students in the classroom e.g., materials development, consultation curriculum modification, etc.), subject areas, communication, and the district's program incentives, time preferences, and format. Items were designed to elicit closed ("yes" or "no") responses. Additional comments were also recorded. The survey was designed to be completed in 10-15 minutes or less. A pretest of the survey revealed no major difficulties.

Administration

A random sample was taken of the 195 General Broadcast Surveys which were signed by the respondents. The sample included 34 percent of the signed surveys and was proportionate across levels according to district staffing and enrollment patterns (50 percent elementary, 25 percent junior high, 25 percent senior high). This was accomplished by arranging the signed surveys alphabetically and by level. Every second elementary respondent, every fourth junior high respondent and every third senior high respondent were chosen resulting in a sample of 66 staff members.

Since the task force felt that responses might be biased if a staff member were contacted by a principal, only

the teacher members of the task force made the telephone contacts. Each member was assigned six telephone surveys to administer.

Results

The telephone survey met with positive response in general. Due to time constraints and difficulty in contacting all respondents, 85 percent of the telephone surveys were completed, representing at least an 80 percent completion rate at each level (elementary, junior and senior high).

The responses were hand tabulated and percentage of favorable response by level for each item was determined. Additional comments were reviewed and noted.

Items receiving at least a 70 percent response across levels included needs in the areas of:

<u>Item No.</u>	<u>Percent of favorable response</u>	<u>Topic</u>
3	81	Consultation at time of need
8	78	Techniques for motivation
2	72	Assistance in curriculum modification
5	71	Jointly planning time with special services personnel

Other items indicated as areas of need at particular levels included:

<u>Item No.</u>	<u>Elem %</u>	<u>Jr Hi %</u>	<u>Sr H1 %</u>	<u>Topic</u>
1	96	83	*	Help in the materials development.

<u>Item No.</u>	<u>Elem %</u>	<u>Jr Hi %</u>	<u>Sr Hi %</u>	<u>Topic</u>
6	96	83	*	Time for tutoring
7	76	75	*	Time for materials development
12	76	75	*	Informal diagnostic techniques.
14	*	75	*	Techniques for effective use of aides/volunteers in working with handicapped.
15	88	*	*	Application of district grading standards to the evaluation of the mainstreamed children's progress in the classrooms.
--	76	*	*	Existence of an encompassing communication problem.
---	76	*	*	Need for development of a more effective communication system.
-	76	*	*	Improvement of district procedures for identification, referral and placement of handicapped students.

*Indicates a favorable response less than 70 percent.

No particular subject area emerged as a single area of need in working with handicapped students.

In terms of the actual planning of inservice activities, 80 percent of the respondents preferred to receive college and recertification credit for participation, although nearly half of the respondents also indicated interest in participation for district inservice credit and personal

growth. The respondents preferred released time (64 percent) or after school time (52 percent) in scheduling activities. The format preferred by respondents included demonstration lessons, consultative services, courses/workshops. Both structured responses and comments indicated that inservice activities needed to be practical, concrete, and visual in nature. The need for follow-up activities and assistance in application of concepts/skills was identified at the elementary (80 percent) and junior high (83 percent) levels. (See Table II for total survey results.)

Discussion

The result of the telephone survey confirmed needs in the areas of communication relating to knowledge and skills for working with handicapped students. Most of these needs relate to individual teachers and children at the building and classroom level and specific training activities can be planned to alleviate these concerns on an individual basis. The task force found it interesting that only elementary level respondents strongly indicated the existence of a more encompassing communication problem.

This finding may be related to the fact that special services programs at the secondary building level have been adjusted to provide special services personnel time to consult with classroom teachers on a regular basis. These programs are generally seen to be an improvement; hence less concern is felt at the secondary level. The elementary special education programs are making similar adjustments to be put into effect for the 1979-80 school year.

Littleton Colorado Attachments

As promised in a previous flier, you are now being asked to complete a needs assessment survey designed to help us determine the staff's areas of concern regarding participation in the special services procedures. It is important that we have a large response to this instrument.

This survey is designed to indicate general areas of concern. In order to obtain more specific data, it will be necessary for the NIN Task Force to collect additional information. If you are willing to express your more specific views on this matter, please write your name and phone number in the space provided on the survey.

NIN GENERAL NEEDS ASSESSMENT

CIRCLE RESPONSES:

Level of Position: Elementary Jr. High Sr. High Other

Responses indicate degree of interest, need to receive additional information, or affect change regarding the following topic:

	INTEREST / NEED			
	None	Little	Much	Great
1. Recent federal and state legislation regarding handicapped students.	1	2	3	4
2. Clarification of district policy for educating handicapped students.	1	2	3	4
3. Roles and responsibilities at the building, district and state levels.	1	2	3	4
4. Coordination and administration of special services programs.	1	2	3	4
5. Due process in special services procedures.	1	2	3	4
6. Effective procedures for identification, referral and placement of handicapped students.	1	2	3	4
7. Case discussion, staffing and other diagnostic procedures: What must be done, why, how, when.	1	2	3	4
8. Rationale and philosophy for mainstreaming handicapped students.	1	2	3	4
9. Effective techniques for integrating handicapped students into regular classrooms.	1	2	3	4

- | | None | Little | Much | Great |
|---------------------------------------------------------------------------------------------------------------------|------|--------|----------|-------|
| 10. Clarification of the meaning of "least restrictive environment." | | | | |
| 11. Development of an effective communication system among regular education, special services and administration. | 1 | 2 | 3 | 4 |
| 12. Alternative environments for providing services to handicapped students. | 1 | 2 | 3 | 4 |
| 13. Making effective use of district-wide support personnel. | 1 | 2 | 3 | 4 |
| 14. Developing an Individual Educational Program (IEP) for each handicapped student. | 1 | 2 | 3 | 4 |
| 15. Assisting regular classroom teachers to improve the education of handicapped students. | 1 | 2 | 3 | 4 |
| 16. Curriculum refinement responsive to student needs and classroom management. | 1 | 2 | 3 | 4 |
| 17. Understanding the criteria for each of the handicapping conditions. | 1 | 2 | 3 | 4 |
| 18. Correlation between class size and the programming of handicapped students. | 1 | 2 | 3 | 4 |
| 19. Techniques for improving active parental involvement and support in the education of the handicapped student. | 1 | 2 | 3 | 4 |
| 20. Within the last five years have you had or do you now have an identified handicapped student in your classroom? | | | Yes / No | |
| 21. Are there any other topics or concerns you would like to see addressed? Please specify _____ | | | | |

Optional:

Name _____ School Phone _____ Home Phone _____

Table 1
Percentage of Favorable Response on
General Broadcast Survey

Favorable Response

<u>Item No.</u>	<u>Elem %</u>	<u>Jr Hi %</u>	<u>Sr Hi %</u>
1	50	46	45
2	62	61	55
3	67	63	59
4	61	53	46
5	52	44	42
6	71	71	70
7	56	62	56
8	66	64	59
9	78	76	72
10	56	57	47
11	76	80	64
12	75	68	69
13	79	71	68
14	52	54	49
15	82	78	72
16	70	72	61
17	58	70	58
18	80	84	65
19	68	78	57
20	82	88	86

Table II
Results of Telephone Survey

<u>Item No.</u>	<u>Special Area of Need</u>	<u>% Favorable Response</u>		
		<u>Elem</u>	<u>Jr Hi</u>	<u>Sr Hi</u>
1	Materials Development	96	83	57
2	Curriculum Modification	80	75	68
3	Consultation at time of Need	96	95	73
4	Demonstration Lessons	72	75	52
5	Joint Planning Time	80	67	73
6	A Time Tutoring	96	83	57
7	A Time Material Develop- ment	76	75	57
8	Techniques for Motiva- tion	84	67	84
9	Behavior Management	68	58	52
10	Classroom Management	56	67	68
11	Scheduling	40	50	31
12	Informal Diagnostic Tech- niques	76	75	52
13	Methods/Materials for Peer Acceptance	60	67	63
14	Techniques for Use of Aides/Volunteers	64	75	63
15	Application of District Grading Standards	88	50	57
<u>Subject Areas</u>				
	Developmental Reading	36	42	36
	Content Area Reading	54	42	47
	Language Arts	52	42	31
	Math	48	33	21
	Science	32	33	14
	Physical Education	24	0	21
	Music	12	0	14
	Art	30	8	15
	Practical Arts	28	25	31
	Social Studies	24	25	31
<u>Communications</u>				
	Does Encompassing Problem Exist?	76	58	29
	Should an Effective Sys- tem be Developed?	76	58	29
<u>District Procedures</u>				
	Should procedures be Im- proved?	76	67	36

<u>Incentive</u>	<u>Elem</u>	<u>Jr Hi</u>	<u>Sr Hi</u>
College Credit	84	75	78
District Inservice			
Credit	60	42	36
Personal Growth	47	33	42
<u>Time</u>			
After School	60	33	68
Weekends	12	0	10
Release Time	80	72	52
Summer	44	67	31
<u>Format</u>			
Speaker/Lecturer	52	17	47
College Courses	68	58	52
Material Production			
Workshop	76	63	26
Consultive Services	76	42	52
Simulated Classroom	48	53	52
Workshops/Class with			
Follow-up Consultation	80	83	47
Individualized Instruc-			
tion	52	50	31
Diagnostic Prescriptive			
Teams	68	8	63
Establishment of a Prof-			
fessional Development			
Center	64	42	58
Mini-workshops	84	63	63
Idea-Sharing Seminar	60	42	52
Hands-on Workshop	84	58	52
Demonstration Lessons	72	63	63
Building Level Workshops	64	33	37
Small Group Discussions	40	36	52

muS15/50
(5/21/79)

TELEPHONE SURVEY

NAME _____

LEVEL: Elementary _____ Jr High _____ Sr Hi _____

SCHOOL _____ GRADE/SUBJECT _____

The NIN Task Force is now developing our proposal for our staff development plans for next year. Our charge is to develop activities to aid classroom teachers in dealing more effectively with their students, especially those with handicaps. We hope you will provide specific information which will help us to design our program.

We have a questionnaire which will take a maximum of ten minutes to complete. Do you have time to answer now, or when may I call you back?

These items will relate to the questions which ranked highest on our Needs Assessment survey. Which of these areas would you like to see included in our staff development program? Answer yes or no.

	YES	NO
1. Help in materials development	___	___
2. Assistance in curriculum modification	___	___
3. Consultation at time of need	___	___
4. Demonstration lessons	___	___
5. Joint planning time with Special Services personnel	___	___
6. Aide time for tutoring	___	___

	YES	NO
7. Aide time for materials development	___	___
8. Technique for motivation	___	___
9. Behavior management	___	___
10. Classroom management (grouping, individualizing, use of centers, games, etc.)	___	___
11. Scheduling	___	___
12. Informal diagnostic techniques	___	___
13. Methods and materials to aid peers in acceptance of handicapped children	___	___
14. Techniques for effective use of aides and/or volunteers in working with handicapped students	___	___
15. Application of district standards to the evaluation of the mainstreamed children's progress in the classroom.	___	___
16. Other _____	___	___
_____	___	___

For mainstreamed students in your classroom, would you like help in providing instruction in any of these areas:

_____ Developmental Reading	_____ Physical Education
_____ Content Area Reading	_____ Music
_____ Language Arts	_____ Art
_____ Math	_____ Practical Arts (Home Ec., Typing, etc.)
_____ Science	
_____ Other _____	

One of the major concerns indicated on our Needs Assessment was the development of our effective communication system between regular and special education. Some of the items just discussed may help to alleviate the problems on an individual

basis.

Do you feel a more encompassing communication problem exists?

☐ YES ☐ NO

If yes, do you feel a more effective communication system
should be developed?

☐ YES ☐ NO

Another concern indicated was the procedures for identifica-
tion, referral, and placement of handicapped students. Do
you feel these district procedures need to be improved?

☐ YES ☐ NO

In planning our program, there are many formats that might
be used. Which of these options would be attractive to you?

INCENTIVE

☐ College credit

☐ District inservice credit

☐ Personal growth

TIME

☐ After school

☐ Weekends

☐ Released time

☐ Summer

FORMATS

☐ Speaker/lecture

☐ College Courses

☐ Material production
workshop

☐ Consultive services

☐ Simulated classroom

☐ Workshop/class with follow-up consultation

☐ Individualized instruction (learning packets).

☐ Diagnostic-prescriptive teams as consultants

☐ Idea sharing seminar

☐ Hands-on workshop

☐ Demonstration lessons

☐ Building level work-
shops

☐ Small group discus-
sions

_____ Establishment of professional development center

_____ Mini-workshops (short, single topics).

_____ Other _____

Thank you for your time.

jp3/7
4/18/79